

WHAT IS CLAIMED IS:

1. An information recording apparatus comprising:
  - a signal process means for applying a predetermined signal process to a plurality of partial record information blocks constructing whole record information to be recorded onto an information record medium to thereby generate processed partial record information blocks each composed of a plurality of predetermined information units, and for generating and outputting recording position information, which is to be recorded by each of predetermined reproduction units composing said information units, for respective one of said reproduction units, said recording position information indicating recording positions on said information record medium of said reproduction units corresponding to reproduction times of said partial record information blocks within a predetermined range before and after said respective one of said reproduction units on an axis of reproduction time of each of said partial record information blocks;
  - a multiplex means for multiplexing said processed partial record information blocks and said recording position information by each of said reproduction units to thereby output multiplexed partial record information; and
  - a record means for recording the multiplexed partial record information onto said information record medium.
2. An information recording apparatus according to claim 1,

wherein said signal process means applies said predetermined signal process to said partial record information blocks, which construct said record information including at least video information, which are to be reproduced at same one reproduction time on the axis of reproduction time, and each of which comprises respective one of said video informations regarding same one object taken from different viewpoints from each other.

3. An information recording apparatus according to claim 1, wherein said signal process means applies said predetermined signal process to said partial record information blocks, which are to be reproduced by information reproducing apparatuses having different setting modes from each other.

4. An information record medium recorded with record information to be reproduced by an information reproducing apparatus for performing a reproduction of a plurality of partial record information blocks composing said record information on the basis of recording position information recorded on said information record medium besides said record information, said information record medium comprising a data structure stored in said information record medium and including:

processed partial record information blocks, which are generated by applying a predetermined signal process to said partial record information blocks, and each of which is composed of a plurality of predetermined information units; and

said recording position information, which is to be recorded by each of predetermined reproduction units composing said information units, said recording position information indicating recording positions on said information record medium of said reproduction units corresponding to reproduction times of said partial record information blocks within a predetermined range before and after respective one of said reproduction units on an axis of reproduction time of each of said partial record information blocks,

said processed partial record information blocks and said recording position information being multiplexed by each of said reproduction units.

5. An information record medium according to claim 4, wherein: said record information includes at least video information; said partial record information blocks are to be reproduced at same one reproduction time on the axis of reproduction time; and each of said partial record information blocks comprises respective one of said video informations regarding same one object taken from different viewpoints from each other.

6. An information record medium according to claim 4, wherein said partial record information blocks are to be reproduced by information reproducing apparatuses having different setting modes from each other.

7. An information reproducing apparatus for reproducing record information from an information record medium comprising a data structure stored in said information record medium and including: processed partial record information blocks, which are generated by applying a predetermined signal process to said partial record information blocks, and each of which is composed of a plurality of predetermined information units; and said recording position information, which is to be recorded by each of predetermined reproduction units composing said information units, said recording position information indicating recording positions on said information record medium of said reproduction units corresponding to reproduction times of said partial record information blocks within a predetermined range before and after respective one of said reproduction units on an axis of reproduction time of each of said partial record information blocks, said processed partial record information blocks and said recording position information being multiplexed by each of said reproduction units, said information reproducing apparatus comprising:

a detection and demodulation means for detecting and demodulating said processed partial record information blocks and said recording position information from said information record medium on the basis of a control signal, to thereby output a demodulation signal;

an extract means for extracting said recording position information out of said demodulation signal; and

a control means for outputting said control signal on the

basis of said extracted recording position information.

8. An information reproducing apparatus according to claim 7, wherein said detection and demodulation means detects and demodulates said processed partial record information blocks, which constructs said record information including at least video information, which are to be reproduced at same one reproduction time on the axis of reproduction time, and each of which comprises respective one of said video informations regarding same one object taken from different viewpoints from each other.

9. An information reproducing apparatus according to claim 7, wherein said detection and demodulation means detects and demodulates said processed partial record information blocks which are to be reproduced by information reproducing apparatuses having different setting modes from each other.

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